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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,171	07/14/2003	Gregory W. Roberts	M5940.001	4300
23875	7590	01/06/2006	EXAMINER	
MOLLY D MCKAY, PC 3207 E 22ND STREET TULSA, OK 74114-1823			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	
DATE MAILED: 01/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,171

Applicant(s)

ROBERTS, GREGORY W.

Examiner

Frederick J. Parker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-1'4-03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 8-15 in the reply filed on 11-17-05 is acknowledged. The amendments to incorporate the previous suggestions of the Examiner are appreciated.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8,12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 8,12 are vague and indefinite because in a and b, a 1<sup>st</sup> end of a supply line and spray device is inserted into a 1<sup>st</sup> duct opening so it exits at a 2<sup>nd</sup> duct opening. However, c requires the device to be pulled by the supply line between the openings, which is confusing because the supply line is never placed into the second opening so the device can be pulled from the 1<sup>st</sup> to the 2nd opening. The Examiner will interpret the claim that

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the device with supply line attached is pulled from the 1<sup>st</sup> to 2<sup>nd</sup> opening to coat the duct interior.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Berdin WO00/44506 dated 8/3/2000 (US 6699324 which derives priority thereof is used in lieu of a translation).

Berdin teaches coating interior surfaces of a pipe or duct (abstract, etc) using a moveable spray device, which is attached to a flexible pull element containing product 21,22 and supply lines. The opposite end of the element and supply lines are attached to a service vehicle containing a spool upon which the element is wound and attached coating source/s. As shown in figure 1 and described on col. 10, the element 4 extends from opening 2b to 2a, where the coating device is attached, and pulled along the duct/ pipe “in an exactly controlled manner” to 2b where the device is removed. A “quick hardening resin or Polyurethane” is applied, which inherently requires curing to allow hardening. The coating material is transported by compressed air using distributing means (“pump”). The spray device is applied to the walls of the duct/ pipe in the travel direction behind the device as it is pulled between openings 2a and 2b.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 11,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berdin in view of Moore et al US 2003/0161946.

Berdin is cited for the same reasons previously discussed, which are incorporated herein. Use of computer control to evenly coat the interior surfaces is not cited.

Moore et al teaches coating the interiors of extended hollow articles such as pipes, where in [0032-33] it is taught that a controller comprising a computer or microprocessor is used to control system components, e.g. to move or rotate a carriage/ spray means, coating material flow rates, etc to provide a coating of uniform thickness, density, porosity, etc. While the coating methods of the references may be somewhat different, Moore is analogous art because it also is directed towards the coating of the interior of hollow extended articles. The Examiner also notes (1) Berdin equates pipes and ducts so that use of the concept of computer control of coating

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system components as taught by Moore would have equally pertained to pipes and ducts, and (2) the teaching in Berdin of applying the coating “in an exactly controlled manner” provides the motivation for incorporating the concept of Moore into the process of Berdin.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Berdin et al by incorporating the concept of using a computer for controlling coating as disclosed by Moore et al to coat “in an exactly controlled manner” to form coatings which are of uniform thickness, density, porosity, etc.

10. Claims 9,10,13,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berdin in view of Brass US 2003/0044523.

Berdin is cited for the same reasons previously discussed, which are incorporated herein. Use of electrostatic charging to coat the interior surfaces is not cited.

Brass teaches to apply liquid coatings to the interior surfaces of passageways/ piping/tubing to uniformly coat the interior walls by using a probe-like nozzle to apply the coating [0056-57] and further to apply a charge to the component to be coated different from the charge on the particles being applied to form the coating, to provide the benefit of improved adhesion of the liquid coating to the substrate. As noted above, Berdin establishes the equivalence of ducts and pipes, so the method would have had equal utility for ducts.

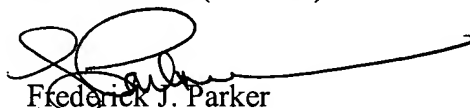
It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the duct coating method of Berdin et al by incorporating the electrostatic coating taught by Brass for coating the interiors of hollow pipes/ passageways to provide the benefit of improved adhesion of the coatings applied to the surfaces to be coated.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Frederick J. Parker  
Primary Examiner  
Art Unit 1762

fjp